Claims

What is claimed is:

5   1. A system for providing data communication between a plurality of electronic modules connected to an I^2C^{TM}-bus, wherein said plurality of electronic modules each are adapted to communicate a data package comprising in a layered structure a physical layer complying with I^2C^{TM}

10 specifications, a data link layer comprising first header field for data payload type and a second header field for a data link layer version, and a network/transport layer comprising a third header field for a transmitting electronic module's address, a

15 fourth header field for a length of said data package, and comprising data payload.

2. A system according to claim 1, wherein said electronic modules comprise a mobile communication

20 device such as a cell, mobile or satellite telephone, a personal digital assistant, or peripherals thereto.

3. A system according to claim 1, wherein said data payload type comprises OBEX, TCP, IP, HTTP, or any

25 proprietary payload type.

4. A system according to claim 1, wherein said data link layer version comprises a major version, which is binary incompatible, and a minor version, which is

30 binary compatible.

5. A system according to claim 1, wherein said data package further comprises in said network/transport

layer a fifth header field for an offset value for determination of data payload start in said data package.

5   6. A system according to claim 1, wherein said data package further comprises in said network/transport layer a sixth header field prior to said data payload start in said data package for buffering.

10   7. A system according to claim 1, wherein said data package further comprises a checksum field following the data payload.

8. A system according to claim 1, wherein said data
15   package further comprises in said network/transport layer a seventh header field for a data package number.

9. A system according to claim 1, wherein said data package further comprises in said network/transport
20   layer an eighth header field for a data package fragment sequence number.

10. A data package for communicating between a plurality of electronic modules connected to an I^2C^{TM}-
25   bus, wherein said data package comprising in a layered structure physical layer data complying with I^2C^{TM} specifications, data link layer data in a first header field comprising data payload type and in a second header field comprising a data link layer version, and
30   network/transport layer data in a third header field comprising a transmitting electronic module's address, in a fourth header field comprising a length of said data package, and comprising data payload.

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11. A data package according to claim 10 further comprising in said network/transport layer a fifth header field for an offset value for determination of

5   data payload start in said data package.

12. A data package according to claim 10, wherein said data payload type comprises OBEX, TCP, IP, HTTP, or any proprietary payload type.

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13. A data package according to claim 10 further comprising in said network/transport layer a sixth header field prior to said data payload start in said data package for buffering.

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14. A data package according to claim 10 further comprising a checksum field following the data payload.

15. A data package according to claim 10 further
20   comprising in said network/transport layer a seventh header field for a data package number.

16. A data package according to claim 10 further comprising in said network/transport layer an eighth
25   header field for a data package fragment sequence number.

17. A receiver unit adapted to receive a data package according to claim 10.

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18. A transmitter unit adapted to transmit a data package according to claim 10.

19. A method for establishing data communication between a plurality of electronic modules connected to an I^2C^{TM}-bus, wherein said plurality of electronic modules each communicate a data package comprising in a

5   layered structure a physical layer complying with I^2C^{TM} specifications, and wherein said method comprising providing in said data package in a data link layer a first header field for data payload type and a second header field for a data link layer version, providing

10   in said data package in a network/transport layer a third header field for a transmitting electronic module's address and a fourth header field for a length of said data package, and providing in said data package a data payload.

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20. A computer program comprising code adapted to perform the following steps when said program is run in a data processor adapted to establish data communication between a plurality of electronic modules

20   connected to an I^2C^{TM}-bus, wherein said plurality of electronic modules each communicate a data package comprising in a layered structure having a physical layer complying with I^2C^{TM} specifications, and wherein said program providing in said data package in a data

25   link layer a first header field for data payload type and a second header field for a data link layer version, providing in said data package in a network/transport layer a third header field for a transmitting electronic module's address and a fourth

30   header field for a length of said data package, and providing in said data package a data payload.

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